# Management Discussion and Analysis

## of the financial position and results of operations

*for the year ended 31 December 2018*

**CONTENT**

## *Forward-looking statement*

*The following review of our financial position and results of operations is based on, and should be read in conjunction with, our consolidated financial statements and related notes for the year ended 31 December 2018.*

*Certain information, including our forecasts and strategy, contains forward-looking statements and is subject to risks and uncertainties, domestically and internationally. In assessing these forward-looking statements, readers should consider various risk factors as the company's actual results may differ materially from the expected results discussed in this report.*

## *Rounding*

*Certain monetary amounts, percentages and other figures included in this report are subject to rounding adjustments. On occasion, therefore, amounts shown in tables may not be the arithmetic accumulation of the figures that precede them, and figures expressed as percentages in the text and in tables may not total 100 percent. Changes for periods between monetary amounts are calculated based on the amounts in thousands of U.S. dollars stated in our consolidated financial statements, and then rounded to the nearest million or percent.*

## Executive overview

We are one of the world's leading producers of steel pipes for the oil and gas industry, a global company with extensive network of production facilities, sales companies and representative offices.

The principal activities of our company are the production and distribution of seamless and welded pipes, including pipes with the entire range of premium connections backed by extensive technical support.

Our plants produce almost the entire range of existing pipes used in the oil-and-gas sector, the chemical and petrochemical industries, energy and machine-building, construction and municipal housing, shipbuilding, aviation and aerospace, and agriculture.

We created an up-to date technological complex based on advanced scientific research, manufacturing high-quality competitive products.

Our operations are geographically diversified with manufacturing facilities in Russia, the United States, Canada, Romania and Kazakhstan. We operate R&D centers in Russia and the U.S. Our global market presence is supported by a wide distribution network. In 2018, we delivered 60% of our tubular products to our customers located in Russia and 24% in North America. We estimate our share on global market of seamless OCTG at around 14%.

We are the largest exporter of pipes in Russia. Exports of pipes produced by our Russian plants accounted for 15% of our total sales in 2018.

In 2018, we sold 3,989 thousand tonnes of steel pipes. Seamless pipes comprised 69% of our sales volumes. Sales of seamless and welded OCTG reached 1,930 thousand tonnes, a 10% year-on-year increase, sales of LDP were up by 14% year-on-year to 303 thousand tonnes.

In 2018, our total consolidated revenue increased by 16% to $5,099 million as compared to 2017. Adjusted EBITDA[1] grew to $700 million as compared to $605 million in the previous year. Adjusted EBITDA margin was flat as compared to 2017 at 14%.

## Market conditions for 2018

The Russian pipe market grew 2% year-on-year, largely driven by higher demand for large diameter pipe. The OCTG market was flat year-on-year, while seamless OCTG consumption was up 2.5%, supported by increasing complexity of hydrocarbon production projects in Russia and higher share of horizontal drilling (from 41% in 2017 to 48% in 2018).

In the U.S., the average rig count increased 18%, according to Baker Hughes, supported by a recovery in crude oil prices and higher E&P spending by the oil and gas companies. This drove higher demand for OCTG pipe throughout the year, with OCTG consumption increasing 17% year-on-year. The high level of inventories formed by distributors at the beginning of the year, ahead of the implementation of Section 232, fell steadily in the last three quarters of the year to normalized levels.

In 2018, conditions in the European pipe market noticeably improved compared to 2017, with higher pipe consumption from both U.S. and domestic customers, increased capacity utilization and a better pricing environment.

## Key events

In February, we won a tender to supply 8 thousand tonnes of high tech tubing with 13% share of chrome (13Cr) and TMK UP PF premium threaded connections to Rosneft during 2018-2019.

[1] Adjusted EBITDA - See "Selected financial data".

In February, we commissioned a new integrated heat treatment line for seamless pipes at TMK-ARTROM, Romania. The facility's treatment capacity stands at 165 thousand tonnes of pipes per annum. The facility enables a full range of heat-treatment services, such as tempering and quenching, normalization, soft annealing and hot straightening. The new facility provides heat treatment for 60–273 mm diameter pipes with 5–60 mm pipe walls.

In February, we successfully completed testing the unique proprietary TMK UP KATRAN premium connection under the Gazprom Scientific and Research Institute of Natural Gases and Gas Technologies (Gazprom VNIIGAZ) program. TMK UP KATRAN is a unique, quick-assembly high-torque connection used for 20" to 36" (508 mm to 914 mm) casing assemblies. TMK UP KATRAN is the only connection that can be used in all Russian offshore projects at any depth and in the most challenging climatic conditions. The connection has been developed entirely by TMK, and is the first 100% Russian product of its kind – previously this type of connections could only be purchased abroad.

In February, Moody's Investors Service (Moody's) has changed the outlook on TMK's ratings from «Negative» to «Stable» and affirmed the Company's B1 corporate rating.

On the July 2, 2018 we paid dividends for 2017 in the amount of 2,356 billion Roubles ($38 million at the exchange rate at the payment date) or 2.28 Roubles per share ($0.04 per share).

In September, TMK's Board of Directors approved a program to repurchase the Company's shares including depositary receipts representing such shares in the open market (the "Buyback Program") for an aggregate amount of up to $30 million. The Buyback Program is to be carried out in 2018–2019.

In September, we partially disposed the ownership in TMK GIPI (to 27.7%).

In October, we shipped a batch of corrosion resistant 13Cr casing pipe with TMK UP premium threaded connections to Gazprom for Kirinskoye oil and gas condensate field. The pipes were successfully run into the well with TMK NGS Buzuluk supervisors' involvement. These pipes were produced under the "future thing" agreement, signed in October 2015 for design, production launch and manufacture of products to Gazprom's specifications for use in the oil major's existing and planned projects.

In November, we opened a new external coating facility at TMK IPSCO's Wilder. The 250 thousand tonnes of annual coating capacity for pipes up to 24 inches (609.6 mm) in diameter is available in Fusion Bond Epoxy (FBE), Abrasion Resistant Overcoat (ARO) and Speciality Coating. The facility is certified to industry and end users' specific standards.

In December, we shipped the batch of casing pipe with TMK UP PF premium threaded connections, prodused at VTZ, to Sakhalin Energy under the long-term agreement for Premium oil&gas pipe supplies.

## Business structure

Our operating segments reflect TMK's management structure and the way financial information is regularly reviewed. For management purposes, TMK is organised into business divisions based on geographical location and has three reporting segments:

- *Russian division*: manufacturing facilities located in the Russian Federation and Kazakhstan, and oilfield service companies and trading companies in Russia, Kazakhstan, Switzerland and the United Arab Emirates. The Russian division is engaged in the production and supply of seamless and welded pipe, premium products and the provision of related services to oil and gas companies;
- *American division*: manufacturing facilities and trading companies located in the United States and Canada. The American division is engaged in the production and supply of seamless and welded pipe, premium products and the provision of related services to oil and gas companies;
- *European division*: manufacturing facilities located in Romania and trading companies located in Italy and Germany. The European division is engaged in the production and supply of seamless pipe and steel billets.

## Year ended 31 December 2018 results

## Results of operations

In 2018, our sales volumes and key financial indicators increased year-on-year, reflecting improved results of all divisions.

| | 2018 | 2017 | Change |
|---|---|---|---|
| | *in million dollars* | | *in million dollars* |
| **Sales volume** ***(in thousand tonnes)*** | **3,989** | 3,784 | 204 |
| **Revenue** | **5,099** | 4,394 | 705 |
| Cost of sales | **(4,183)** | (3,521) | (662) |
| **GROSS PROFIT** | **916** | 872 | 43 |
| *GROSS PROFIT MARGIN* | ***18%*** | 20% | |
| Net operating expenses [1] | **(517)** | (544) | 27 |
| Impairment of assets | **(17)** | (7) | (9) |
| Foreign exchange gain/(loss), net | **(72)** | 28 | (100) |
| Gain/(loss) on changes in fair value of derivative financial instrument | **0** | (3) | 3 |
| Finance costs, net | **(232)** | (268) | 36 |
| Gain/(loss) on disposal of subsidiaries | **(24)** | 0 | (24) |
| Other non-operating income/(expenses) | **(9)** | 1 | (9) |
| **PROFIT/(LOSS) BEFORE TAX** | **45** | 78 | (33) |
| Income tax benefit/(expense) | **(45)** | (48) | 3 |
| **NET PROFIT/(LOSS)** | **(0.2)** | 30 | (30) |
| *NET INCOME MARGIN* | ***0%*** | *1%* | |
| **ADJUSTED EBITDA** | **700** | 605 | 95 |
| *ADJUSTED EBITDA MARGIN* | ***14%*** | *14%* | |

[1] Net operating expenses include selling and distribution, general and administrative, advertising and promotion, research and development, share of profit in associate, gain on disposal of subsidiary and net other operating income/(expense).

## Sales

In 2018, our consolidated revenue increased by $705 million or 16%. Negative currency translation effect[1] was $250 million. Excluding this effect our revenue increased by $955 million year-on-year.

Sales by reporting segments are as follows:

| | 2018 | 2017 | Change | Change |
|---|---|---|---|---|
| | *in thousand tonnes* | | *in thousand tonnes* | *in %* |
| Russia | **2,985** | 2,926 | 59 | 2% |
| America | **804** | 673 | 131 | 19% |
| Europe | **201** | 186 | 15 | 8% |
| **TOTAL PIPE** | **3,989** | 3,784 | 204 | 5% |
| | *in million dollars* | | *in millions dollars* | *in %* |
| Russia | **3,442** | 3,163 | 279 | 9% |
| America | **1,349** | 989 | 360 | 36% |
| Europe | **308** | 242 | 66 | 27% |
| **TOTAL REVENUE** | **5,099** | 4,394 | 705 | 16% |

Sales by group of products are as follows:

| | 2018 | 2017 | Change | Change |
|---|---|---|---|---|
| | *in thousand tonnes* | | *in thousand tonnes* | *in %* |
| Seamless pipe | **2,743** | 2,671 | 72 | 3% |
| Welded pipe | **1,246** | 1,113 | 132 | 12% |
| **TOTAL PIPE** | **3,989** | 3,784 | 204 | 5% |
| | *in million dollars* | | *in millions dollars* | *in %* |
| Seamless pipe | **3,550** | 3,074 | 476 | 15% |
| Welded pipe | **1,272** | 1,086 | 185 | 17% |
| **TOTAL PIPE** | **4,822** | 4,161 | 661 | 16% |
| Other operations | **277** | 233 | 44 | 19% |
| **TOTAL REVENUE** | **5,099** | 4,394 | 705 | 16% |

***Russia***. The division's revenue increased by $279 million or 9% year-on-year. Negative currency translation effect was $258 million. Excluding this effect revenue was up by $537 million.

Revenue from sales of *seamless* pipe increased by $391 million due to better sales mix, reflecting higher sales volumes of *OCTG*, and better pricing environment.

Revenue from sales of *welded* pipe increased by $68 million mainly as a result of higher *LDP* sales, which also led to better product mix.

Revenue from other operations increased by $79 million mainly as a result of a significant growth in *billets* sales.

[1] The currency translation effect on income/expense items illustrates the influence of different exchange rates we use to convert these items from functional currencies into the presentation currency, the U.S. dollar, in different reporting periods for financial reporting purposes.

***America.*** In the American division revenue increased by $360 million or 36% year-on-year.

The stabilization on the North American market conditions resulted in a considerable growth in sales volumes, primarily *OCTG*. Following an improved market environment, revenue from sales of both *seamless* and *welded* pipe increased by $183 million and $175 million respectively following higher *OCTG* sales and better pricing environment.

Revenue from other operations increased by $2 million.

***Europe.*** In the European division revenue increased by $66 million or 27% year-on-year. Favorable currency translation effect was $8 million. Excluding this effect revenue grew by $58 million.

Revenue from sales of *seamless* pipe increased by $78 million as compared to the last year as a result of better product mix, pricing environment and higher sales volumes.

Revenue from other operations, mostly from *billets* sales, decreased by $20 million as compared to previous year following lower sales volumes.

## Gross profit

In 2018, our consolidated gross profit increased by $43 million or 5% year-on-year and amounted to $916 million. Negative currency translation effect was $57 million. Excluding this effect our gross profit increased by $100 million. Gross profit margin was 18% compared to 20% in 2017.

Gross profit results by reporting segments are as follows:

| | 2018 | | 2017 | | Change |
|---|---|---|---|---|---|
| | *in million dollars* | *in % to revenue* | *in million dollars* | *in % to revenue* | *in million dollars* |
| Russia | **652** | **19%** | 655 | 21% | (3) |
| America | **182** | **13%** | 170 | 17% | 12 |
| Europe | **82** | **27%** | 48 | 20% | 34 |
| **TOTAL GROSS PROFIT** | **916** | **18%** | 872 | 20% | 43 |

Gross profit results by group of products are as follows:

| | 2018 | | 2017 | | Change |
|---|---|---|---|---|---|
| | *in million dollars* | *in % to revenue* | *in million dollars* | *in % to revenue* | *in million dollars* |
| Seamless pipe | **824** | **23%** | 732 | 24% | 92 |
| Welded pipe | **67** | **5%** | 111 | 10% | (44) |
| **TOTAL PIPE** | **892** | **18%** | 843 | 20% | 48 |
| Other operations | **24** | **9%** | 29 | 13% | (5) |
| **TOTAL GROSS PROFIT** | **916** | **18%** | 872 | 20% | 43 |

***Russia.*** The division's gross profit decreased by $3 million. Negative currency translation effect was $59 million. Excluding this effect gross profit increased by $56 million. Gross profit margin was 19% compared to 21% in 2017.

Gross profit from sales of *seamless* pipe grew by $75 million as a result of the improved product mix and favorable pricing environment. Gross profit was negatively affected by raw material prices.

Gross profit from sales of *welded* pipe decreased by $10 million as a result of higher raw material prices.

Gross profit from other operations decreased by $9 million, the effect of higher sales volumes was fully offset by growth in raw material prices.

***America.*** The American division's gross profit increased by $12 million or 7%. Gross profit margin amounted to 13% compared to 17% in 2017.

Gross profit from sales of *seamless* pipe grew by $36 million following better market conditions and higher sales volumes. Gross profit was negatively affected by raw material prices.

Gross profit from sales of *welded* pipe decreased by $26 million affected by raw material prices.

Gross profit from other operations increased by $2 million.

***Europe.*** Gross profit in the European division increased by $34 million. Favorable currency translation effect was $2 million. Excluding this effect gross profit increased by $32 million. Gross profit margin amounted to 27% compared to 20% in 2017.

Gross profit from sales of *seamless* pipe was up by $29 million as a result of better product mix, favorable pricing environment and higher sales.

Gross profit from other operations increased by $3 million as compared to 2017.

## Net operating expenses

Net operating expenses were lower by $27 million or 5% primarily as a result of negative currency translation effect. The share of net operating expenses, expressed as a percentage of revenue, was 10% compared to 12% in 2017.

## Adjusted EBITDA

In 2018, adjusted EBITDA increased by $95 million or 16% as compared to previous year. Adjusted EBITDA margin was flat at 14%.

| | **2018** | | **2017** | | **Change** |
|---|---|---|---|---|---|
| | ***in million dollars*** | ***in % to revenue*** | ***in million dollars*** | ***in % to revenue*** | ***in million dollars*** |
| Russia | **485** | **14%** | 463 | 15% | 22 |
| America | **164** | **12%** | 114 | 12% | 50 |
| Europe | **51** | **17%** | 28 | 12% | 23 |
| **TOTAL ADJUSTED EBITDA** | **700** | **14%** | 605 | 14% | 95 |

***Russia.*** Adjusted EBITDA was higher by $22 million following a decrease in selling, general and administrative expenses and other operating expenses. Adjusted EBITDA margin was 14% compared to 15% in 2017.

***America.*** Adjusted EBITDA increased by $50 million following an improved market environment. Adjusted EBITDA margin stayed almost flat and amounted to 12%.

***Europe.*** Adjusted EBITDA increased by $23 million as compared to 2017. An increase in gross profit was partially offset by growth in selling, general and administrative expenses. Adjusted EBITDA margin amounted to 17% as compared to 12% in 2017.

## Impairment of assets

In the year ended December 31, 2018, we recognised the impairment loss of $17 million compared to $7 million loss in 2017. The impairment loss in 2017 was $24 million and the reversal of impairment was $16 million.

## Foreign exchange movements

In 2018, we recorded a foreign exchange loss in the amount of $72 million as compared to a $28 million gain in 2017. In addition, we recognised a foreign exchange loss from exchange rate fluctuations in the amount of $116 million (net of income tax) in 2018 as compared to a $14 million gain (net of income tax) in 2017 in the statement of other comprehensive income. The amount in the statement of comprehensive income represents the effective portion of foreign exchange gains or losses on our hedging instruments.

In 2018, we recognised the reclassification of foreign currency reserves related to the hedged net investment in foreign operation from other comprehensive loss to the income statement in the amount of $23 million (net of income tax), related to partially disposed ownership in TMK GIPI.

## Net finance costs

Net finance costs decreased by $36 million or 14%. The weighted average nominal interest rate was 7.29% as of 31 December 2018 as compared to 8.16% as of 31 December 2017.

## Cash flows

The following table presents our cash flows:

| | 2018 | 2017 | Change |
|---|---|---|---|
| | *in million dollars* | | *in million dollars* |
| **Net cash provided by operating activities** | **510** | 312 | 199 |
| Payments for property and equipment | **(273)** | (233) | (41) |
| Other investments | **18** | (2) | 21 |
| **Free Cash Flow** | **256** | 77 | 179 |
| Change in loans | **(46)** | 318 | (364) |
| Interest paid | **(235)** | (270) | 34 |
| Other financing activities | **(31)** | 108 | (139) |
| **Free Cash Flow to Equity** | **(57)** | 233 | (290) |
| Dividends paid | **(39)** | (36) | (3) |
| Effect of exchange rate changes | **(4)** | 17 | (21) |
| **Cash and cash equivalents at the beginning of period** | **491** | 277 | 215 |
| **Cash and cash equivalents at period end** | **392** | 491 | (99) |

Net cash flows provided by operating activities increased by $199 million to $510 million from $312 million in the previous year. In 2018, working capital increased by $145 million compared to a $252 million increase in 2017. The increase was mainly a result of growth in inventories and trade receivables.

Net repayment of borrowings amounted to $46 million as compared to $318 million of net proceeds in 2017.

Cash and cash equivalents at the end of the period amounted to $392 million as compared to $491 million at the end of 2017.

## Indebtedness

Our overall financial debt decreased to $2,867 million as of 31 December 2018 from $3,239 million as of 31 December 2017. Net repayment of borrowings in 2018 was $46 million. The depreciation of the Rouble against the U.S. dollar also resulted in our debt decrease. Our Net debt amounted to $2,437 million as compared to $2,688 million as of 31 December 2017.

As of 31 December 2018, our debt portfolio comprised diversified debt instruments, including bank loans, bonds and other credit facilities. As of 31 December 2018, the U.S. dollar-denominated portion of our debt represented 43%, Rouble-denominated portion of debt represented 53%, euro-denominated portion of debt represented 3% of our total debt.

The share of our short-term debt increased to 31% as of 31 December 2018 compared to 18% as of 31 December 2017.

As of 31 December 2018, our debt portfolio comprised fixed and floating interest rate debt facilities. Borrowings with a floating interest rate represented $141 million or 5% of total debt, and borrowings with a fixed interest rate represented $2,743 million or 95% of our total debt.

As of 31 December of 2018, our weighted average nominal interest rate was 7.29%, which was an 87 basis point decrease compared to 31 December 2017.

Our most significant credit facilities as of 31 December 2018 were as follows:

| Type of borrowing | Bank | Original currency | Outstanding principal amount | Maturity period |
|---|---|---|---|---|
| | | | *in millions of U.S. dollars* | |
| 6.75% bonds | | USD | 500 | April 2020 |
| Loan | Gazprombank | USD | 400 | June 2021 |
| Loan | Sberbank | RUR | 202 | August 2022 |
| Loan | Gazprombank | RUR | 144 | August 2019 |
| Loan | VTB | RUR | 144 | December 2021 |
| Bonds | | RUR | 144 | May 2021 |
| Loan | Gazprombank | RUR | 129 | March 2019 |
| Loan | Sberbank | RUR | 103 | August 2022 |
| Loan | Alfa bank | RUR | 86 | July 2021 |
| Loan | Sberbank | RUR | 86 | December 2021 |
| | | | **1 938** | |
| Other credit facilities | | | 937 | |
| Unamortised debt issue costs | | | (8) | |
| **TOTAL LOANS AND BORROWINGS** | | | **2 867** | |

## Development trends

In Russia, we expect pipe consumption of the domestic oil and gas companies to remain strong in 2019. The increased complexity of hydrocarbon production projects in Russia is expected to result in higher demand for high tech products.

In the U.S., the rig count continued to grow in 2018 driving higher demand for OCTG pipe. Consumption in the North American pipe market remained flat, reflecting marginally higher drilling activity in the United States, as operators took a wait-and-see approach to falling oil prices. As of the end of 2018, inventories returned to normalized levels.

In Europe, we expect stable demand for seamless industrial pipe in 2019. The division's sales mix is estimated to include a higher share of high value-added products.

Overall, we anticipate higher EBITDA for FY 2019 supported by further improvements across all three divisions, with EBITDA margin being slightly above the level of full-year 2018.

## Selected financial data

### Adjusted EBITDA

Reconciliation of income before tax to Adjusted EBITDA for the twelve months ended:

| | 31 December 2018 | 30 September 2018 | 30 June 2018 | 31 March 2018 | 31 December 2017 |
|---|---|---|---|---|---|
| | | | *in million dollars* | | |
| Income before tax | **45** | 43 | 79 | 35 | 78 |
| Depreciation and amortisation | **268** | 271 | 270 | 268 | 263 |
| Finance costs, net | **232** | 246 | 256 | 266 | 268 |
| Impairment of assets | **17** | 10 | 10 | 7 | 7 |
| Loss/(gain) on changes in fair value of derivative financial instrument | **0** | 0 | 0 | 0 | 3 |
| Foreign exchange (gain)/loss, net | **72** | 48 | 24 | 21 | (28) |
| Loss/(gain) on disposal of property, plant and equipment | **12** | 22 | 22 | 21 | 21 |
| Movement in allowances and provisions (except for provisions for bonuses) | **5** | 1 | 9 | (12) | (25) |
| Other non-operating income/(expenses) | **50** | 42 | 18 | 17 | 17 |
| Other non-cash items | **(1)** | 0 | 0 | 0 | 0 |
| **Adjusted EBITDA** | **700** | 682 | 687 | 624 | 605 |

Adjusted EBITDA is not a measure of our operating performance under IFRS and should not be considered as an alternative to gross profit, net profit or any other performance measures derived in accordance with IFRS or as an alternative to cash flow from operating activities or as a measure of our liquidity. In particular, Adjusted EBITDA should not be considered to be a measure of discretionary cash available to invest in our growth. Adjusted EBITDA has limitations as an analytical tool, and potential investors should not consider it in isolation, or as a substitute for analysis of our operating results as reported under IFRS.

The following limitations of Adjusted EBITDA as an analytical tool should be considered:

• Adjusted EBITDA does not reflect the impact of financing or finance costs on our operating performance, which can be significant and could further increase if we were to incur more debt;

• Adjusted EBITDA does not reflect the impact of income taxes on our operating performance;

• Adjusted EBITDA does not reflect the impact of depreciation and amortisation on our operating performance. The assets that are being depreciated and/or amortised will have to be replaced in the future and such depreciation and amortisation expense may approximate the cost to replace these assets in the future. By excluding this expense from Adjusted EBITDA, it does not reflect our future cash requirements for these replacements; and

• Adjusted EBITDA does not reflect the impact of other non-cash items on our operating performance, such as foreign exchange (gain)/loss, impairment/(reversal of impairment) of non-current assets, movements in allowances and provisions, (gain)/loss on disposal of property, plant and equipment, (gain)/loss on changes in fair value of financial instruments, share of (profit)/loss of associate and other non-cash items.

## Net Debt

Net debt has been calculated as of the dates indicated:

| | 31 December 2018 | 30 September 2018 | 30 June 2018 | 31 March 2018 | 31 December 2017 |
|---|---|---|---|---|---|
| | | | ***in million dollars*** | | |
| Loans and borrowings less interest payable | **2 867** | 2 941 | 2 990 | 3 127 | 3 239 |
| *Net of:* | | | | | |
| Cash and short-term financial investments[1] | **(430)** | (317) | (275) | (416) | (551) |
| **NET DEBT** | **2 437** | 2 624 | 2 715 | 2 710 | 2 688 |
| **NET DEBT TO EBITDA (LTM[2])** | **3.48** | 3.85 | 3.95 | 4.35 | 4.44 |

Net Debt is not a measure under IFRS, and it should not be considered to be an alternative to other measures of financial position. Other companies in the pipe industry may calculate Net Debt differently and therefore comparability may be limited. Net Debt is a measure of our operating performance that is not required by, or presented in accordance with, IFRS. Although Net Debt is a non IFRS measure, it is widely used to assess liquidity and the adequacy of a company's financial structure. Management believes Net Debt provides an accurate indicator of our ability to meet our financial obligations, represented by gross debt, from available cash. Net Debt demonstrates investors the trend in our net financial position over the periods presented.

[1] Cash and short-term financial investments include Cash and cash equivalents, Other financial assets and short-term loans issued.

[2] Net Debt-to-EBITDA ratio is defined as the quotient of Net Debt at the end of the given reporting date divided by the Adjusted EBITDA for the 12 months immediately preceding the given reporting date. Adjusted EBITDA – see "Selected financial data".

## Principal risks and uncertainties

### Industry risks

***Dependence on the oil and gas industry***

The oil and gas industry is the principal consumer of steel pipe products worldwide and accounts for most of our sales, in particular sales of OCTG, line pipe and large-diameter pipe. In 2018, sales volumes of pipes used in oil and gas industry accounted for approximately 78% of our tubular products.

The oil and gas industry has historically been volatile and downturns in the oil and gas markets can adversely affect demand for our products, which largely depends on the number of oil and gas wells being drilled, completed and reworked, the depth and drilling conditions of wells and the construction of oil and gas pipelines. The level of such industry specific activities in turn depends on the level of capital spending by major oil and gas companies. The level of investment activities of oil and gas companies, which is largely driven by prevailing prices for oil and natural gas and their stability, significantly affects the level of consumption of our products.

Thus, the decline in oil and gas exploration, drilling and production activities, prices for energy commodities and other economic factors beyond our control could adversely affect our results of operations.

***Increases in the cost of raw materials***

We require substantial quantities of raw materials to produce steel pipes. The principal raw materials used in production processes include scrap and ferroalloys for use in steelmaking operations, steel billets used for the production of seamless pipe and steel coils and plates for the production of welded pipe. The demand for the principal raw materials we utilize is generally correlated with macroeconomic fluctuations, which in turn are affected by global economic conditions.

Prices for raw materials and supplies have a key influence on our production costs and are one of the main factors affecting our results of operations. There are many factors which influence raw materials prices, including oil and gas prices, worldwide production capacity, capacity utilization rates, inflation, exchange rates, trade barriers and developments in steelmaking processes. In 2018, the cost of scrap metal in Russia in Rouble-terms increased on average by 19%, and the cost of coils increased by 16%. At the same time, we are negotiating new contract terms with our major clients based on pricing formulas, which secure us against growing raw materials prices. The share of raw materials' and consumables' costs in the total cost of production in 2018 was 67%. The increase in prices for scrap, coils and other raw materials, if not passed to customers can adversely affect our profit margins and results of operations.

Our plants also consume significant quantities of energy, particularly electricity and gas. In 2018, energy and utility costs comprised approximately 7% of our total cost of production. The prices for electricity for our plants increased by 5% in Rouble-terms compared to 2017, while the average prices for domestic natural gas for our plants increased by 3% in Rouble-terms. If we are required to pay higher prices for gas and electricity in the future, our costs will rise and this could have a material adverse effect on our business, financial condition, results of operations and prospects.

***Dependence on a small group of customers***

As we focus on supplying primarily the oil and gas industry, our largest customers are oil and gas companies. In 2018, our five largest customers were Rosneft, Gazprom, Surgutneftegas, CTAP LLC and SOONER PIPE LLC, which together accounted for 37% of our total sales volumes. The increased dependence of pipe sales on a single large customer bears the risk of an adverse effect on results of operations in the event that our relationship with any of these major customers deteriorates.

Our LDP business is largely dependent on one of our largest customers, Gazprom. In 2018, 68% of our LDP were sold for Gazprom projects. Increased competition in the supply of LDP or a change in relationships with Gazprom could negatively affect our competitive position in the large-diameter pipe market, resulting in decreased revenues from sales of these products and adversely affecting our business, financial position and results of operations. Additionally, large-diameter pipe business depends significantly upon the level of construction of new oil and gas pipelines in Russia and the CIS. The delay, cancellation or other changes in the scale or scope of significant pipeline projects, or the selection by the sponsors of such projects of other suppliers could have an adverse effect on our sales of LDP, and thus on the results of operations and financial position.

***Competition***

The global market for steel pipe products, particularly in the oil and gas sector, is highly competitive. In the Russian and CIS markets, we face competition primarily from ChTPZ, OMK, and the Ukrainian and Chinese pipe producers.

After accession to the WTO Russia had adjusted its national legislation in full accordance with WTO rules and regulations, what allowed Russia along with the EEU (Eurasian Economic Union) to use WTO trade defense mechanism for the national market protection. To date, the following antidumping measures are effective in EEU: antidumping duties in the amount 18.9%-19.9% on imports of some types of steel tubes and pipes originated from Ukraine that were extended till 2021, anti-dumping duties ranging from 4.32% to 18.96% on imports of seamless corrosion resistant steel tubes and pipes originating from Ukraine, antidumping duties in the amount 19.15% on imports of cold-drawn stainless steel pipes originated from China and Malaysia, antidumping duties 12.23%-31% in respect to OGTG originated from China.

Outside Russia and the CIS, we compete against a limited number of premium-quality pipe products producers, including Tenaris, Vallourec, Sumitomo, Voestalpine and Chinese producers.

The US market is protected by more than 50 defense measures, the trade defense of the American market is constantly being improved. For example, in 2018 in the USA antidumping duties were prolonged in the amount of 30.8% for LDP from Japan, the following defense measures were introduced for pipe products: anti-dumping and countervailing duties for non-alloy welded pipes from Brazil, Mexico, Korea and Taiwan in the amount of 4.91% to 103.38%, on welded carbon pipes from Taiwan - from 9.7% to 43.7%

A number of new trade investigations were also initiated: anti-dumping on welded pipes from China, compensatory and anti-dumping against the import of large-diameter pipes from Canada, Greece, Turkey, China and India.

In accordance with Section 232 of the Trade Expansion Act, in February 2018, protective duties, which amounts to 25%, were imposed in the USA on imports of steel goods. These decisions are expected to ensure the alignment of conditions of the competition in the market of pipe products in Russia and America and contribute to the improvement of market positions of Russian and American plants.

We may not be able to compete effectively against existing or potential producers and preserve our current share of the various geographical or product markets in which we operate. A failure to compete effectively in one or more of these markets could have a material adverse effect on our business, financial condition, results of operations and prospects.

## Financial risks

### *Liquidity risk*

Liquidity risk is the risk that TMK will not be able to meet its financial obligations as they fall due. TMK's approach to managing liquidity is to ensure that it will always have sufficient liquidity assets to meet its obligations when due.

TMK manages liquidity risk by maintaining adequate cash reserves and borrowing facilities, by continuously monitoring forecast and actual cash flows and matching the maturity profiles of financial assets and liabilities.

As of December 31, 2018, our total debt increased to $2,867 million as compared to $3,239 million at the end of 2017, partially due to the Rouble depreciation against the U.S. dollar. Net repayment amounted to $46 million. As of December 31, 2018, our Net-Debt-to-EBITDA ratio was 3.48x.

As of 31 December 2018, we committed credit lines in Russian, European and American banks with the available limit of $423.4 million.

Nevertheless, there can be no assurance that our efforts to improve liquidity profile and reduce leverage will prove successful. The negative debt market reaction on deteriorating global political and financial situation, US and EU sanctions, economic situation in Russia may have an adverse impact on our ability to borrow in banks or capital markets, and may put pressure on our liquidity, significantly increase borrowing costs, temporary reduce the availability of credit lines or lead to and possibility to incur financing on acceptable terms.

### *Compliance with covenants*

Certain amount of our loan agreements and public debt securities currently include financial covenants. Some covenants impose financial ratios that must be maintained, others impose restrictions in respect of certain transactions, including restrictions in respect of indebtedness, pledging of assets and material asset disposals. A breach of financial or other covenants in existing debt facilities, if not resolved by means such as obtaining a waiver from the relevant lender and/or making amendments to debt facilities, could trigger a default under our obligations.

We are in compliance with lenders' requirements under covenants.

In case financial markets or economic situation on the markets, where we operate, deteriorate in the future, we may not comply with relevant covenants. In case of possible breach we will apply best efforts to obtain all necessary waivers or standstill letters. We do not expect the occurrence of such events in the near future.

### *Interest rate risk*

Some of our loans and borrowings are subject to variable rates of interest. Accordingly, we remain subject to interest rate risk resulting from fluctuations in the relevant reference rates for such debt. Some loan agreements contain a right of creditors at its sole discretion to change interest rates including in case of change of credit indicators by the Central Bank of Russia and in some other cases.

The increase in such interest rates will result in an increase in our interest expense and could have a material adverse effect on our financial condition, results of operations or prospects.

### *Currency risk*

Our products' prices as well as our costs are nominated both in Roubles and in other currencies (generally, in U.S. dollars and euro).We hedge our net investment in operations located in the United States against foreign currency risks using U.S. dollar denominated liabilities. Gains or losses on the hedging instruments relating to the effective portion of the hedge are recognised as other comprehensive income while any gains or losses relating to the ineffective portion are recognised in the income statement. In 2018, we incurred foreign exchange loss from spot rate changes in the total amount of $72 million. In addition, we recognised foreign exchange loss of $116 million (net of income tax) in the statement of comprehensive income.

Also TMK is exposed to currency risk on the borrowings that are denominated in currencies other than the functional currencies of the respective TMK's members. The currencies in which these transactions are denominated are primarily Rubles, US dollars and euro. As of December 31, 2018, 43% of our loans were denominated in U.S. dollar. In this regards, as well as taking into consideration continuing volatility of the Rouble against U.S. dollar, the risk of losses owing to the Rouble devaluation remains sufficiently high. Depreciation of the Rouble against the U.S. dollar could adversely affect our net profit as coherent losses will be reflected in our consolidated income statements. Nevertheless, TMK is partly secured from currency risks as foreign currency denominated sales occasionally are used to cover repayment of foreign currency denominated borrowings.

***Inflation risk***

A significant amount of our production activities are located in Russia, and a majority of direct costs are incurred in Roubles. We tend to experience inflation-driven increases in certain costs, such as raw material costs, transportation costs, energy costs and salaries that are linked to the general price level in Russia. In 2018, inflation in Russia increased to 4.3% as compared to 2.5% in 2017. In spite of the measures of the Russian government to contain inflation, growth of inflation rates may be significant in the short-term outlook. We may not be able to increase the prices sufficiently in order to preserve existing operating margins.

Inflation rates in the United States, with respect to our American division operations, are historically much lower than in Russia. In 2018, inflation in the United States was 1.9% and remained close to the level of the previous year.

High rates of inflation, especially in Russia, could increase our costs, decrease our operating margins and adversely affect our business and financial position.

**Legal risks**

***Changes in tax legislation and tax system***

Our subsidiaries make significant tax and non-budgetary funds payments, in particular, profit tax, VAT, property tax and payments to social security funds. Changes in tax legislation could lead to an increase in tax payments and, consequently, to a lowering of financial results. As significant part of the operations is located in Russia, the main risks relate to changes in the legislation of the Russian tax system. The Russian Government continually reviews the Russian tax legislation. The new laws generally reduce the number of taxes and the overall tax burden on business while simplifying tax legislation. Nevertheless, should the Russian taxation system suffer any changes related to increasing of tax rates, this could adversely affect our business.

Moreover, the Russian oil industry is subject to substantial taxes, including significant resources production taxes and significant export customs duties. Changes to the tax regime and customs duties rates may adversely affect the level of oil and gas exploration and development in Russia, which can adversely affect the demand for our products in Russia.

***Changes in environmental law***

We meet the requirements of national environmental laws at our industrial capacities location areas: the directives and regulations of Russian, the United States, the European Union, Romanian and Kazakhstan legislation.

The main ecological-and-economical risks of our Russian plants are related to changes and tightening of the Russian environmental protection laws. Environmental legislation in Russia is constantly developing. The imposition of a new law and regulation system may require further expenditures to install new technological and waste disposal equipment, pollution and wastewater control equipment, as well as will lead to growth of the rate of payments for negative impact on the environment. It is expected that compliance with the regulations will be accompanied by stricter control by state monitoring authorities.

We estimate that the environmental legislation of the European Union and the United States, Romania and Kazakhstan will not undergo any material changes in the near future. Nevertheless, if such changes arise, the cost of compliance with new requirements could have a material adverse effect on our business.

## Other risks

### *Equipment failures or production curtailments or shutdowns*

Our production capacities are subject to equipment failures and to the risk of catastrophic loss due to unanticipated events, such as fires, explosions and adverse weather conditions. Our manufacturing processes depend on critical pieces of steel-making and pipe-making equipment. Such equipment may, on occasion, be out of service as a result of unanticipated failures, which could require us to close part or all of the relevant production facility or cause us to reduce production on one or more of our production lines.

Any interruption in production capability may require us to make significant and unanticipated capital expenditures to effect repairs, which could have a negative effect on our profitability and cash flows. Any recoveries under insurance coverage that we may obtain may not offset the lost revenues or increased costs resulting from a disruption of our operations.

A sustained disruption to our business could also result in delays to or cancellations of customer orders and contractual penalties, which may also negatively impact our reputation among our customers. Any or all of these occurrences could have a material adverse effect on our business, results of operations, financial condition and prospects.

### *Insurance against all potential risks and losses*

We maintain insurance against losses that may arise in case of property damage including business interruption insurance, accidents, transportation of goods. We also maintain corporate product liability and directors and officers liability insurance policies.

We maintain obligatory insurance policies required by law and provide employees with medical insurance as part of our compensation arrangements with our employees.

Nevertheless, we do not carry insurance against all potential risks and losses, and our insurance might be inadequate to cover all of our losses or liabilities or may not be available on commercially reasonable terms.

### *Ability to effect staff alterations and shortages of skilled labor*

Our Russian subsidiaries are in many regions the largest employers in the cities in which they operate, such as Volzhsky, Taganrog, Kamensk-Uralsky and Polevskoy. While we do not have any specific legal social obligations or responsibilities with respect to these regions, the ability to effect alterations in the number our employees may nevertheless be subject to political and social considerations. Any inability to make planned reductions in the number of employees or other changes to operations in such regions could have an adverse effect on the results of operations and prospects.

Competition for skilled labor in the steel pipe industry remains relatively intense, and labor costs continue to increase moderately, particularly in the CIS, Eastern Europe and the United States. We expect the demand and, hence, costs for skilled engineers and operators will continue to increase, reflecting the significant demand from other metallurgical companies and other industries. Continual high demand for skilled labor and continued increases in labor costs could have a material adverse effect on our business, financial position and results of operations.

**Responsibility statement**

We confirm to the best of our knowledge that:

1. the consolidated financial statements prepared in accordance with International Financial Reporting Standards and presented together with this Management Discussion and Analysis of financial condition and results of operation give a true and fair view of the assets, liabilities, financial position and profit or loss of PAO "TMK" and its consolidated subsidiaries, taken as a whole; and

2. the Management Discussion and Analysis includes a fair review of the development and performance of the business and the position of PAO "TMK" and its consolidated subsidiaries, taken as a whole.

Alexander G. Shiryaev
Chief Executive Officer, PAO "TMK"

Tigran I. Petrosyan
Chief Financial Officer, PAO "TMK"

01 March 2019